

Orchids
of
The National Parks of Haiti

by
Donald D. Dod
and
Walter S. Judd



PWMMV-074

IAN: 45339

The Orchidae
of
La Visite and Macaya National Parks
Haiti

by

Donald D. Dod
Jardin Botanico Nacional
Santo Domingo,
Republica Dominicana

and

Walter S. Judd, PhD
Department of Botany
University of Florida
Gainesville Florida
32611

January 1986

Prepared for USAID/Haiti under Contract Number
521-0169-C-00-3083-00

The Orchidaceae of La Visite and Macaya National Parks,
Haiti.

Donald D. Dod
Jardín Botánico Nacional
Apartado 21-9
Santo Domingo, República Dominicana

Walter S. Judd
Department of Botany
220 Bartram Hall
University of Florida
Gainesville, FL 32611

The geographically isolated Massif de la Hotte probably has a greater diversity of orchid species than any other comparable area in Hispaniola. A total of 133 species (in 42 genera) has been collected within Parc National Pic Macaya, and of these, some 38 are endemic to the Massif de la Hotte, and an additional 58 are endemic to Hispaniola (see list). The Orchidaceae is clearly the largest family in the flora of the park, with the next largest family, the Melastomataceae, possessing only 34 species. The large number of orchid species occurring in this small region (ca. 10 km²) is especially noteworthy considering that the entire island of Hispaniola contains less than 350 species. The most important genera include: Pleurothallis (22 spp.), Lepanthes (16 spp.), Lepanthopsis (12 spp.), Stelis (12 spp.), and Epidendrum (12 spp.). Forty-three species collected during this study are apparently undescribed. Orchid species occur at all elevations, from the low-growing forests that cover some of the karst hills at 950-1150 m alt. in the vicinity of Formon, to the moist pine forests/cloud forests of the higher elevation of Morne Formon and Pic Macaya (to 2450 m alt.).

Within the karst forests of Formon (i.e., moist forest on limestone, ca. 950-1250 m alt.) there is great variation in the distribution of orchid species. Edaphic conditions seem to have a marked effect on local species composition. Both epiphytic and terrestrial species are well represented.

The higher elevation pine forests and cloud forests of Morne Formon have, as expected, a sharply reduced orchid diversity. However, the bowl-shaped valley below the "1650 camp" on the southern slope of Morne Formon possesses an interesting orchid flora of some 40 species, including Lankesterella orthantha, a species not previously known from Haiti. Other noteworthy taxa collected on the southern slope of Morne Formon include: Stelis jenssenii, along with at least two undescribed species of this genus, several species of Lepanthes, Malaxis massonii, a new species of Cranichis, and C. galatea. The very moist forests of the

ridge of Morne Formon contain a more limited variety of orchid species. However, several taxa in the Pleurothallidinae were found to be limited to these high elevation forests; other noteworthy species include Epidendrum soratae, a rare epiphyte originally found in the high Andes, and an undescribed species of Goodyera.

Several species, which would be expected to occur within the park, but have not yet been found, include: Oncidium tuerckheimii, Quisqueya sp., Fuertesiella pterichoides, Cranichis wagenerii, Barbosella monstrabilis, Brachionidium sp., Bulbophyllum sp., Campylocentrum spp., Cryptophoranthus sp., Dilomilis scirpoidea, Domingoa nodosa, Psychilis dodii, P. domingensis, P. vernicosa, Epidendrum rivulare, Pleurothallis aristata, P. claudii, P. dodii, P. miquelii, P. murex, P. pubescens, P. pendens, P. wilsonii, Prescottia oligantha, Stelis domingensis, S. repens, and Vanilla wrightii.

The very diverse orchid flora of the Parc National Pic Macaya, especially considering the locally extensive destruction of the region's forests, indicates the biological importance of the region, and the necessity of its preservation. The only way to protect the marvelous assemblage of orchids in the park is to stop all cutting of broad leaved trees, and prohibit the use of fire to "clean" the adjacent land being used for agriculture. Protection of the habitat is essential.

The orchids of the Parc National Morne la Visite are very incompletely known, since the senior author was able to spend only the equivalent of two days in the region. A total of 12 species was collected in the park (see list), however a study of published records indicates that ca. 40 species probably occur in the region. The conspicuous taxa, Quisqueya ekmanii Dod, Q. holdridgei Dod, and Oncidium tuerckheimii Cogn. may eventually be discovered in the park. Most taxa occur in cloud forest areas, along streams, or on cliff faces.

**Orchidaceae collected in Parc National Pic Macaya,
Massif de la Hotte, Haiti**

[Distribution symbols: C= Cuba and Massif de la Hotte, EH=endemic to Massif de la Hotte, H=endemic to Hispaniola, R=rare in Hispaniola; sp. nov.=new species discovered as part of this study.]

- Anacheilium cochleatum (L.) Hoffmg.
Anacheilium vespum Vell.
Beadlea elata (Sw.) Small
Beadlea laxiflora H.
Beadlea sp.
Calanthe calanthoides A. Rich.
Campylocentrum sp.
Cochleanthes flabelliformis

Comparertia falcata Poepp. & Endl.
Corymborkis sp. R.
Cranichis galatea Dod sp. nov. EH, R.
Cranichis muscosa Sw.
Dichaea glauca (Sw.) Lindl.
Dichaea graminoides (Sw.) Lindl.
Dichaea morrisii Fawc. & Rendle
Dichaea muricata (Sw.) Lindl.
Dichaea swartzii (C. Schweinf.) Garay & Sweet R.
Dichaea trichocarpa (Sw.) Lindl.
Dilomilis montana
Elleanthes capitatus (R. Br.) Rchb. f.
Elleanthes linifolius Presl.
Encyclia pygmaea Hook.
Encyclia sintenisii (Rchb. f.) Britton
Epidendrum anceps Jacq.
Epidendrum blancheanum Urb. R.
Epidendrum difforme Jacq.
Epidendrum jamaicense Lindl.
Epidendrum carpophorum
Epidendrum nocturnum Jacq.
Epidendrum paranaense J. B. Rodrigues
Epidendrum polygonatum Lindl. R.
Epidendrum ramosum Jacq.
Epidendrum repens Cogn.
Epidendrum rigidum Jacq.
Epidendrum soratae R.
Erythrodes plantaginea Fawc. & Rendle
Erythrodes sp.
Eulophia alta (L.) Fawc. & Rendle
Goodyera hispaniolae Dod H, R.
Habenaria monorrhiza (Sw.) Rchb.
Hapalorchis lineatis
Isochilus linearis (Jacq.) R. Br.
Jacquiniella globosa (Jacq.) Schlechter.
Jacquiniella teretifolia (Sw.) Britt. & Wils.
Lankesterella orthantha (Kranzl.) Garay R.
Lepanthes furcatipetala EH, R.
Lepanthes sp. nov. 1 EH.
Lepanthes sp. nov. 2 EH.
Lepanthes sp. nov. 3 EH.
Lepanthes sp. nov. 4 EH.
Lepanthes sp. nov. 5 EH.
Lepanthes sp. nov. 6 EH.
Lepanthes sp. nov. 7 EH.
Lepanthes sp. nov. 8 EH.
Lepanthes sp. nov. 9 EH.
Lepanthes sp. nov. 10 EH.
Lepanthes sp. nov. 11 EH.
Lepanthes sp. nov. 12 EH.
Lepanthes sp. nov. 13 EH.
Lepanthes sp. nov. 14 EH.
Lepanthes sp. nov. 15 EH.
Lepanthopsis anthoctenia (Rchb. f.) Ames H.

Lepanthopsis aristata Dod sp. nov. EH.
Lepanthopsis atrisetifer Dod sp. nov. EH.
Lepanthopsis constanzensis H.
Lepanthopsis cucullata Dod sp. nov. EH.
Lepanthopsis haitiense Dod sp. nov. EH.
Lepanthopsis hotteana Mansf. EH.
Lepanthopsis lingulata Dod sp. nov. EH.
Lepanthopsis michelii Dod sp. nov. EH.
Lepanthopsis ornipteridion Dod sp. nov. EH.
Lepanthopsis paryskii Dod sp. nov. EH.
Lepanthopsis pygmaea EH.
Liparis neuroglossa
Lycaste barringtoniae (Smith) Lindl.
Macradenia lutescens R. Br.
Malaxis domingensis Ames
Malaxis megalantha Dod sp. nov. EH.
Malaxis massonii
Maxillaria adendrobium (Rchb. f.) Dressler
Maxillaria conferta (Griseb.) C. Schweinf.
Maxillaria croceorubens (Rchb. f.) L. O. Wms. EH.
Maxillaria rufescens Lindl.
Neocogniauxia hexaptera (Cogn.) Schlter.
Oncidium ariza-julianum Withner & Jiménez H.
Oncidium compressicaule Withner H.
Oncidium variegatum Sw.
Pelezia adnata Cogn.
Pleurothallis appendiculata Cogn.
Pleurothallis brigamii S. Wats.
Pleurothallis compressicaule Dod sp. nov. H.
Pleurothallis cordatifolia Dod H.
Pleurothallis corniculata (Sw.) Lindl. C.
Pleurothallis dominicensis Cogn.
Pleurothallis erosa Urb. H.
Pleurothallis foliata Griseb.
Pleurothallis formondii Dod sp. nov. EH.
Pleurothallis gelida Lindl.
Pleurothallis curtisii Dod sp. nov.
Pleurothallis haitiensis Dod sp. nov. H.
Pleurothallis lichenicola Griseb. C.
Pleurothallis mitchellii Dod sp. nov. EH.
Pleurothallis mornicola Mansf. H.
Pleurothallis oblongifolia Lindl.
Pleurothallis parvula H.
Pleurothallis ruscifolia (Jacq.) R. Br.
Pleurothallis testaeefolia (Sw.) Lindl.
Pleurothallis tribuloides (Sw.) Lindl. C.
Pleurothallis tricostata Cogn. H.
Pleurothallis sp. nov. EH.
Polyradicion lindenii (Lindl.) Garay
Polystachya concreta (Jacq.) Garay & Sweet
Ponthieva sp. 1
Ponthieva sp. 2
Prescottia stachyoides (Sw.) Lindl.
Reichenbachianthus reflexus (Lindl.) Brade.

Sacoila lanceolata Aubl.
Spiranthes torta (Thunb.) Garay & Sweet
Stenorrhynchos speciosa (Jacq.) Lindl.
Stelis jenssenii Urb. EH.
Stelis pygmaea Cogn.
Stelis sp. nov. 1 EH.
Stelis sp. nov. 2 EH.
Stelis sp. nov. 3 EH.
Stelis sp. nov. 4 EH.
Stelis sp. nov. 5 EH.
Stelis sp. nov. 6 EH.
Stelis sp. nov. 7 EH.
Stelis sp. nov. 8 EH.
Stelis sp. nov. 9 EH.
Stelis sp. nov. 10 EH.
Trichopilia fragrans (Lindb.) Rchb. f.
Xylobium palmifolium (Sw.) Benth.
New genus, new species, not named EH.

Orchidaceae collected in Parc National Morne La Visite,
Massif de la Selle, Haiti

Anacheilum cochleatum (L.) Hoffmg.
Calanthe calanthoides A. Rich.
Lepanthes sp. 1.
Lepanthes sp. 2.
Lepanthes sp. 3.
Lepanthopsis cf. barahonensis (Cogn.) Garay
Oncidium compressicaule Withner
Oncidium variegatum Sw.
Pleurothallis domingensis Cogn.
Ponthieva pauciflora (Sw.) Fawc. & Rendle
Prescottia stachyodes (Sw.) Lindl.
Stelis cf. desportesii Urb.